



COEF SRL.
Via Albinatico, 80-82
51019 Ponte Buggianese (PT)
ITALY
www.coef.it / www.coef.net
info@coef.it

PERFORMANCE 250 DV / DVP

Realized by PC CAD & VIDEO



- **Code 02A016 Performance 250 DV**
- **Code 02A017 Performance 250 DVP**

- **OPERATING INSTRUCTIONS**



ATTENTION: carefully read the directions of this manual. Exclusively follow the safety rules in force and do not carry out assembly and/or maintenance operations without taking all precautions as indicated in the different sections or without the necessary specialization.

This manual must always accompany the equipment, therefore it must be available and readable at any moment if necessary. Also in case of sale, rent, change of place and/or ownership, these documents shall be enclosed with the relative equipment.

Declaration of CE Conformity

We, Manufacturer/Importer **COEF srl.** Via Albinatico, 80-82 / 51019 Ponte Buggianese (Pistoia) ITALY
Declare that the products

PERFORMANCE 250 DV **PERFORMANCE 250 DVP**

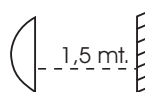
are in conformity with in accordance with **89/336 EEC-EMC** Directive and with the actual required safety standards in accordance with LVD 73/23 EEC

ADVICES FOR A CORRECT INSTALLATION

This equipment is destined to an exclusively Professional use.

- 1) Make sure that all the fastening parts of the spotlight are in good condition. Regulate the proportions of the fastening accessories (screws, bushes, nuts, supports, etc.) in order to be slightly over-dimensioned as compared to the actual requirements.
- 2) Carefully check the contents of the packaging and the completeness of the components. If any of the parts listed hereunder is missing, please contact your Dealer immediately.
- 3) Do not install the projector outside where the influence of atmospheric factors could damage the unit working (rain, wind, intense heat etc.) or indoor if there is a high percentage of humidity.
- 4) Do not clean the projector using water jets or immersion in different liquids. Scrupulously follow the indications given in the chapter MAINTENANCE.
- 5) Make the electric connections and the installation / replacement of the lamp after having disconnected the power supply and after having positioned the power switch to OFF. The apparatus is classified as belonging to Class 1 type of protection against electric shocks. Its connection to an earthed mains unit is compulsory. The equipment must be protect by an adeguated magneto-thermal switch. You are recommended to equip the system with aptly dimensioned differential switches.
- 6) Do not touch in any case the internal and external parts of the projector without previous authorization of the constructor and make modifications only by the intervention of qualified staff.
- 7) Make sure that the projector is correctly fixed on the support as indicated in par. 3.3
- 8) If the bulb explodes, the particular design of the apparatus prevents the splinters from going outside the projector. All the parts, therefore, shall be complete and perfectly assembled. The lenses, if visibly damaged, shall be replaced by original spare parts.
- 9) **Minimum distance from illuminated objects:** The projector must be positioned in such a way that objects struck by the light beam are located at least 1,5 metres from the projector objective.

- 10) **Minimum distance from inflammable materials:** 0.1 meters
- 11) **MAX ambient temperature:** 40° C.
- 12) **MAX external surface temperature:** 60° C.
- 13) Don't look directly the lamp trough the lens.
- 14) We recommend not to look at the lamp without wearing a proper protection; also ensure that the covers are assembled to the equipment.
- 15) Inside the equipment there are high temperatures and tension/current values which might be very dangerous. It is necessary to disconnect the equipment from the mains before removing its protection covers and wait for 30 minutes at least before touching any part inside.
- 16) Do not switch on the equipment if its lamp is not inserted.
- 17) Leave sockets and air outlets free from encumbrances and clean them periodically (see "Maintenance" section).
- 18) Do not leave the packaging elements (polystyrene, nylon, metal parts, etc.) unattended.



We recommend you read the entire manual very carefully, particularly the sections concerning correct installation and safety procedures. This manual is an integral part of the supplied apparatus, therefore you are requested to keep it with care for future reference.

This manual has been organized in order support the user, the installer or the maintenance operator of the described unit with those necessary informations for a correct use of the installation and working procedures of the same unit. The various procedures will be just signalled by indicators (when necessary) evidencing the operation dangers and the necessity of technical support.

Please find here below a list of symbols and relative meaning:



OPERATOR : Not particularly qualified staff, that can operate when no specific knowledge is required



COEF OPERATOR: Technical staff, qualified and trained by the constructor, for repair and extraordinary operations.



MECHANICAL OPERATORS: Staff employed in the ordinary mechanical maintenance.



SPECIALIZED MECHANICAL OPERATOR: Qualified staff employed in extraordinary authorized installations and repair.



ELECTRIC OPERATORS: Staff employed in the ordinary electric maintenance.



SPECIALIZED ELECTRIC OPERATORS: Qualified staff employed in extraordinary authorized installations and repairs.



DANGER SIGNAL: Generic danger signal and electric shock danger signal .

GENERAL WARRANTY CONDITIONS

- The guarantee is valid for a period of 12 months from the date of purchase of the equipment.
- The guarantee is not valid in case a wrong voltage or frequency is selected.
- The parts which are proved to have manufacturing defects are also covered by the guarantee.
- The external parts of the equipment, its removable elements and lamps are excluded from the guarantee; for these parts we recommend to follow the directions supplied by their manufacturers.
- The guarantee is not valid in case of tampering or repairs carried out by non-authorized personnel.
- The replacement of the equipment during the validity of the guarantee is not provided for.
- The transport freights from and to the manufacturer for repairs under guarantee are at Customer's charge.
- When applying for the repair, always mention the serial number and the model of the equipment.

PACKING CONTENTS

Carefully check the contents of the packaging and the completeness of the components. If any of the parts listed hereunder is missing, please contact your Dealer immediately:

- **Performance 250 DV or DVP** complet unit.
- This user manual.
- 1 connector XLR 3 pin male.
- 1 connector XLR 3 pin female.
- 1 connector POWER.

PROTECT NATURE.

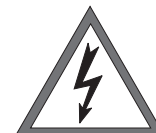
DO NOT DISPOSE OF THE PACKAGING IN THE ENVIRONMENT.
CAREFULLY KEEP THE BOX AND THE COMPONENTS OF THE PACKAGING FOR ANY DISPLACEMENT OR RE-SHIPMENT OF THE EQUIPMENT.

Do not leave the packaging elements (polystyrene, nylon, metal parts, etc.) unattended.

1.0 INSTALLATION

The constructor is not be considered responsible in case of:

- Improper use of the unit or use by not trained staff
- Use in contrast with the directions on work safety
- Wrong installation
- Defective power supply
- Serious lacks in the necessary maintenance
- Unauthorized modifications and interventions
- Use of spare parts that are not original or not specific for the unit
- Total or partial inobservance of instructions
- Unusual events



2.0 LAMP MOUNTING AND REPLACING



The unit mounts high pressure lamp with external traditional striker.

The lamp must be changed if damaged or deformed by heat.

WARNING: switch off the projector before operating.

Read carefully the lamp builder's instructions.



Wait at least 10 minutes after the projector has been switched off before operating again, in order to let it cool down and avoid the lamp explosion.

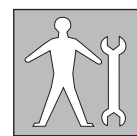
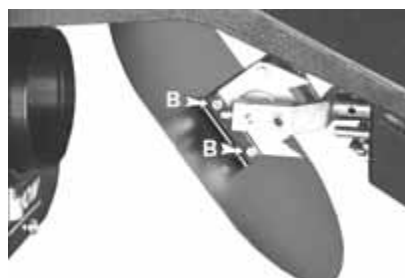
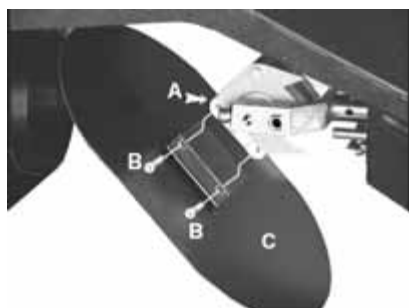
Wait 20 minutes in case you are operating with the bare hands in order to avoid burns.

Screw the two screws off (part. A) and remove the round cover that's supporting the lampholder.

Insert the lamp in the socket. Insert delicately the lamp in the projector support, driving it with the round cover.

Pay attention: the lampholder's wires must correctly reenter in the projector. Block the cover screwing the screws up (part. A).

2.1 MIRROR MOUNTING OR REPLACEMENT



Remove the elastic band that's blocking the motor of scansion group. For the mirror replacement (C), screw the two screws (B) and remove the broken mirror. Install the new spare part (its support is already mounted by the factory) on the motor A, carefully closing, using an hexagonal screwdriver.

WARNING! The mirror is very delicate, so you must handle it with great care.

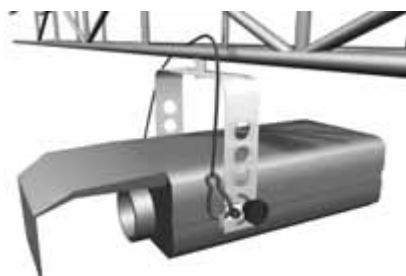
2.2 MACHINE INSTALLATION

To fix the **Performance 250 DV/DVP** is necessary, when the installation has to be on a raised-from-the ground support, to block the fixing bracket of the unit by means of a screw provided with nut and locknut measuring not less than **M10X50**, to insert in the central pre-arranged hole on the fixing bracket.

In order to guarantee a necessary security and in respect of the actual safety rules concerning the projectors' installation, it is compulsory to install a safety-chain (or steel cable), equipped with spring clips, to connect the **Performance 250 DV/DVP**'s body to the fixing structure.

ATTENTION: the safety-chain must be properly installed and fixed to the supporting structure, in a way that an incidental given in of the main bracket would lead to the shortest possible fall of the projector. **After such an intervention the safety-chain must be replaced.**

ATTENTION: COEF is not responsible for installations not correctly made or made without respecting the above indications: those installations are considered dangerous.



When you need to disassemble the fixing bracket of the **Performance 250 DV/DVP**, refer to figure to re-assemble correctly the bracket with all its components, without damaging its functionality and security.

3.0 TECHNICAL NOTES

PERFORMANCE 250 DV PERFORMANCE 250 DVP

Code: 02A016

Code: 02A017

- Lamp MSD 250/2 - 2000 hours life - socket GY 9,5
- 6 metal and 2 dichroic rotating gobos all interchangeable and indexable position on 540°
- Set of 10 extra metal gobos, given with the projector
- 1 diameter projection reducer
- 10 basic colors + white + 7 bi-colors
- 2 color conversion filters superimposing to the basic colors for a total of 33 colors + bi-colors (only DVP version)
- Rainbow effect
- Blacklite filter
- 2 rotating prisms : 3 facet and 6 facet (only DVP version)
- Dimmer from 0 to 100% (only DVP version)
- FROST Effect (only DVP version)
- Adjustable strobe
- Adjustable focus
- Multifunctional display
- Remote reset via DMX; selectable from display
- Software Upgrade via DMX (with UNI-PROG 8 accessory)
- Internal self-test with led indicator
- Internal power factor correction
- DMX 512 Standard
- 8/9 control channels (only DVP version)

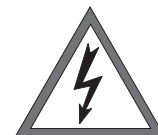
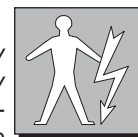
Power supply - Absorbed power			
V~	Hz	I	W
230	50	1.8	400
230	60	1.7	380

4.0 - CONNECTIONS

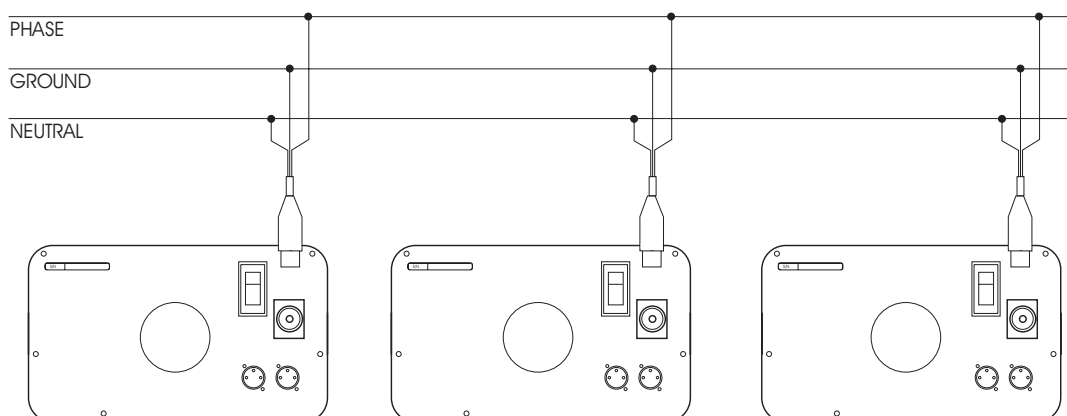
4.1 - Power supply connections

WARNING: In order to guarantee the utmost safety, connect the apparatus only to a properly earthed mains system. The projector is designed to work at the tension and frequency indicated by the electrical data label on the rear. Before connecting the projector to the mains, a qualified electrician must check its conformity. Should there be different electrical characteristics or special steps to be carried out, please contact COEF by telephone or e-mail elettronica@coef.it

Supply the projector by connecting it as indicated in picture.

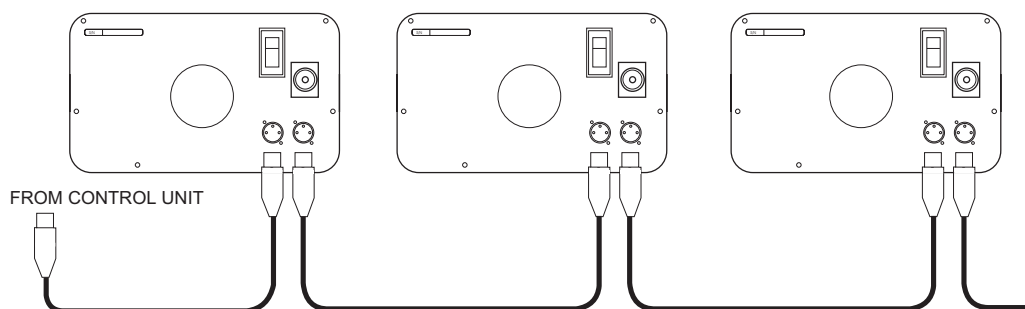
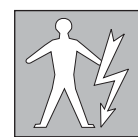


Power supply: 230V~ (+5% / -10%) 50/60 Hz. Voltage and frequency are indicated on the rear of the projector.
Power absorbed: 400W - 1,8 A for 230V~ 50Hz.

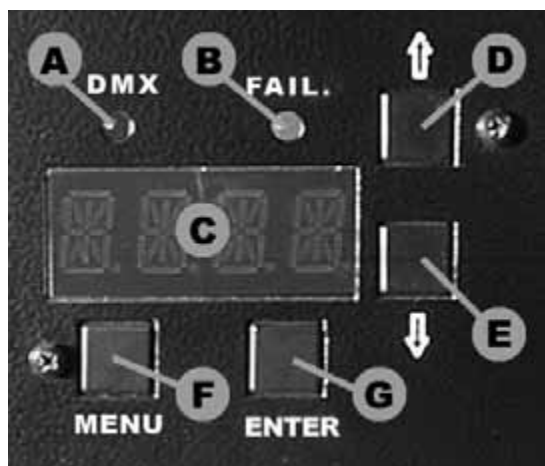


4.2 - DMX 512 Connection

Connect the projector and the control unit to a wire in conformity with the EIA RS-485 standards: braided bipolar, shielded, 120 ohm of characteristic impedance, 22-24 AWG, equipped with Cannon 3 Pin XRL plugs. Respect the DMX 512 signal input and output according to the panel indications. A terminal pin with 120 ohm resistance ($\frac{1}{4}$ Watt minimum) must be inserted between the terminals 2 and 3 in the last piece of apparatus.



5.0 SPECIAL FUNCTIONS AND PROJECTOR ASSIGNMENT



On the front panel of **Performance 250 DV/DVP** you'll find a section for the additional functions and for setting the projector.

Following the picture, you can see all the offered possibilities in detail.

All operations are to be carried out with the **F, G, E, D** buttons, respectively indicated as **MENU, ENTER, DOWN** and **UP**.

The display **C** will inform you about the selected functions.

The 2 **A, B**, leds will allow you to know:

A = reception of the DMX line.

B = The errors presence indicated on the **ERR** table.

On switching the projector on, the display will indicate the type of projector and the version of control software which have been installed. To this purpose, please remember that this type of projector belongs to a new generation of projectors, designed with the possibility of updating the software version through the normal DMX connection by means of a programmer deliberately created: **UNI-PROG 8**.

After the indication **MSTR HOME**, the projector carries out the RESET and gets ready to be controlled from the connected console.

The display will indicate 1 as default value. This means that the first channel occupied by the projector will respond to the values sent to channel 1 by the DMX line. This also means that according to the total number of channels assigned to the projector by means of the CH8/9 function, MISC menu (only DVP model) (see Table 4.1), we shall be able to check the **Performance 250 DV/DVP** with the 1 to 8/9 channels (DVP) 1 to 6 (DV) of the DMX line. This enables us to make **Performance 250 DV/DVP** (which we are installing) completely independent from control or integral with any other installed projector.

General Rules:

Refer to the Table of Section 4.1 in the following page.

By each pressure, Button **MENU** (F) permits to go backwards by one level.

E and D (**DOWN** and **UP**) buttons select functions and sub-functions.

Button G (**ENTER**) enters the function and confirms a control.

By pressing Button **MENU** (F) and buttons **UP** and **DOWN** (D and E) you can select the menu you have to modify.

Once the wished menu is reached, press Button G (**ENTER**) to confirm your selection and enter the function.

Press **D** or **E** to enter the sub-functions if available.

Always confirm your selection with **ENTER**.

Press **MENU** to go out of the function and press again to go back to the starting level.

Example: We installed our projector on the ceiling and for this reason we want the visualization of the display to be correct.

- Press **MENU**
- Press **D** (UP) (12 times for DVP) (10 times for DV) up to "**MISC**"
- Press **ENTER** the Display will show "**RSET**"
- Press **D** (UP) twice up to "**DSPL**"
- Press **ENTER** the Display will show "**ONOF**"
- Press **D** (UP) once up to "**STRV**"
- Press **ENTER** the Display will show "**STND**"; this is the actual configuration state.
- Press **D** (UP) once up to **R.E.V.**; the blinking point indicate the available configuration.
- Press **ENTER** The Display visualization as been rotated to 180°.

The indication of the display will automatically come back after 120 sec. and inform on the set starting channel DMX.

If we are now in a sub-function, this automatic device will not assume control.

5.1 MENU, FUNCTION & SUB-FUNCTION

MENU	FUNCTION	SUB-FUNCTION	DESCRIPTION
DMX	1 / 507 DV 1 / 505 DVP 8ch 1 / 504 DVP 9Ch		DMX start channel
TIME	LAMP	SHOW - KH, H RST - GO?	Lamp working hours (KH=thousands H=hours) Lamp working hours reset (confirm by ENTER)
	MACH	SHOW - KH, H	Projector working hours (KH=thousands H=hours)
ERR	E OK		NO ERROR
	E110		EEPROM failure
	E210		Malfunction of the SHUTTER motor
	E220		Malfunction of the COLOR motor/sensor
	E230		Malfunction of the GOBOS motor/sensor
	E240		Malfunction of the GOBOS ROT. motor/sensor
	E250		Malfunction of the PAN motor
	E260		Malfunction of the TILT motor
	E270 (only DVP)		Malfunction of the EFFECT wheel motor/sensor
	W310		Checksum Setup not valid
	W410		Lamp working hours for more than 1900 hours.
SHUT	HOME		HOME SHUTTER
	TEST		TEST SHUTTER
COL	HOME		HOME COLOR
	TEST		TEST COLOR
	CSHUT	(*) OFF / ON	Color change in black-out position
	MODE	(*) MOD1 / MOD2	Color switching or linear wheel motion
GOBO	HOME		HOME GOBOS
	TEST		TEST GOBOS
	GSHUT	(*) OFF / ON	GOBO change in black-out position
RGOB	HOME		HOME GOBOS rotation
	TEST		TEST GOBOS rotation
EFF (only DVP)	HOME		HOME EFFECT wheel
	TEST		TEST EFFECT wheel
REFF (only DVP)	TEST		TEST EFFECT rotation
PAN	HOME		HOME PAN movement
	TEST		TEST PAN movement
	STRV	(*) STND / REV	Switch movement direction (DX / SX)
TILT	HOME		HOME TILT movement
	TEST		TEST TILT movement
	STRV	(*) STND / REV	Switch movement direction (UP / DOWN)
SCH	CH1 / CH9 DVP	CH1 / CH6 DV	DMX value for the indicated channel
MISC	RSET		MASTER HOME (Starting RESET)
	RDMX	(*) YES / NO	MASTER HOME via DMX control
	DSPL	(*) ON / OFF	Display on / Display off
		(*) STND / REV	180° rotation of the visualization display
	SWPT	(*) STND / SWAP	Channel control switch PAN / TILT
	CH8/9(onlyDVP)	(*) CH 8 / CH 9	Projector control (8 or 9 channels)
	VER		Show the installed software version.

6.0 CHANNELS AND DIGITAL VALUES

CH	6 CHANNELS (DV)	8 CHANNELS (DVP)	9 CHANNELS (DVP)
1	SHUTTER / STROBE 0 - 20 SHUTTER closed 21 - 50 STROBE Random 51 - 250 STROBE Speed adjustment 251 - 255 SHUTTER open	SHUTTER / STROBE / DIMMER 0-5 SHUTTER closed 6-100 DIMMER adjustment 101-110 DIMMER 0 → 100% Automatic 6 sec. 111-120 DIMMER 100% → 0 Automatic 6 sec. 121-126 DIMMER 0 → 100% slow Fuster shut down 127-132 DIMMER 0 → 100% middle Fuster shut down 133-138 DIMMER 0 → 100% fast Fuster shut down 139-144 DIMMER 100% → 0 slow Fuster open 145-150 DIMMER 100% → 0 middle Fuster open 151-156 DIMMER 100% → 0 fast Fuster open 157-162 Dimmer 0 → 100% → 0 slow 163-168 Dimmer 0 → 100% → 0 middle 169-174 Dimmer 0 → 100% → 0 fast 175-180 Str. lamp from 1 to 6 random [reg. 0.0-0.5 sec.] 181-186 Str. lamp from 1 to 6 random [reg. 0.6-1.5 sec.] 187-192 Str. lamp from 1 to 6 random [reg. 1.6-2.5 sec.] 193-250 STROBE Speed adjustment 251-255 SHUTTER open	SHUTTER / STROBE / DIMMER 0-5 SHUTTER closed 6-100 DIMMER from channels 9 value 101-110 DIMMER 0 → 100% Automatic 6 sec. 111-120 DIMMER 100% → 0 Automatic 6 sec. 121-126 DIMMER 0 → 100% slow Fuster shut down 127-132 DIMMER 0 → 100% middle Fuster shut down 133-138 DIMMER 0 → 100% fast Fuster shut down 139-144 DIMMER 100% → 0 slow Fuster open 145-150 DIMMER 100% → 0 middle Fuster open 151-156 DIMMER 100% → 0 fast Fuster open 157-162 Dimmer 0 → 100% → 0 slow 163-168 Dimmer 0 → 100% → 0 middle 169-174 Dimmer 0 → 100% → 0 fast 175-180 Str. lamp from 1 to 6 random [reg. 0.0-0.5 sec.] 181-186 Str. lamp from 1 to 6 random [reg. 0.6-1.5 sec.] 187-192 Str. lamp from 1 to 6 random [reg. 1.6-2.5 sec.] 193-250 STROBE Speed adjustment 251-255 SHUTTER open
	COLOR MODE 1 0 - 5 Neutral 6 - 15 Yellow 16 - 25 Blue 26 - 35 Magenta 36 - 45 Green light 46 - 55 Orange 56 - 65 Cyano 66 - 75 Pink 76 - 85 Red 86 - 95 Blu light 96 - 105 Green 106 - 115 Wood 116 - 125 White-Yellow 126 - 135 Yellow-Blue 136 - 145 Blue-Magenta 146 - 155 Green light-Orange 156 - 165 Orange-Cyano 166 - 175 Cyano-Pink 176 - 185 Red-Blue light 186 - 195 Blue light-Green 196 - 200 Random full-color (slow) 201 - 205 Random full-color (fast) 206 - 230 CW Rotation adjustment 231 - 255 CWW Rotation adjustment	COLOR MODE 1 0 - 5 Neutral 6 - 15 Yellow 16 - 25 Blue 26 - 35 Magenta 36 - 45 Green light 46 - 55 Orange 56 - 65 Cyano 66 - 75 Pink 76 - 85 Red 86 - 95 Blu light 96 - 105 Green 106 - 115 Wood 116 - 125 White-Yellow 126 - 135 Yellow-Blue 136 - 145 Blue-Magenta 146 - 155 Green light-Orange 156 - 165 Orange-Cyano 166 - 175 Cyano-Pink 176 - 185 Red-Blue light 186 - 195 Blue light-Green 196 - 200 Random full-color (slow) 201 - 205 Random full-color (fast) 206 - 230 CW Rotation adjustment 231 - 255 CWW Rotation adjustment	COLOR MODE 1 0 - 5 Neutral 6 - 15 Yellow 16 - 25 Blue 26 - 35 Magenta 36 - 45 Green light 46 - 55 Orange 56 - 65 Cyano 66 - 75 Pink 76 - 85 Red 86 - 95 Blu light 96 - 105 Green 106 - 115 Wood 116 - 125 White-Yellow 126 - 135 Yellow-Blue 136 - 145 Blue-Magenta 146 - 155 Green light-Orange 156 - 165 Orange-Cyano 166 - 175 Cyano-Pink 176 - 185 Red-Blue light 186 - 195 Blue light-Green 196 - 200 Random full-color (slow) 201 - 205 Random full-color (fast) 206 - 230 CW Rotation adjustment 231 - 255 CWW Rotation adjustment
2	COLOR MODE 2 0 - 5 Neutral 6 - 10 Yellow 11 - 15 Blue 16 - 20 Magenta 21 - 25 Green light 26 - 30 Orange 31 - 35 Cyano 36 - 40 Pink 41 - 45 Red 46 - 50 Blu light 51 - 55 Green 56 - 60 Wood 61 - 180 Positioning 181 - 185 Random fast 186 - 190 Random middle 191 - 195 Random slow 196 - 200 Random very slow 201 - 215 Random very fast 216 - 235 CW Rotation adjustment 236 - 255 CWW Rotation adjustment	COLOR MODE 2 0 - 5 Neutral 6 - 10 Yellow 11 - 15 Blue 16 - 20 Magenta 21 - 25 Green light 26 - 30 Orange 31 - 35 Cyano 36 - 40 Pink 41 - 45 Red 46 - 50 Blu light 51 - 55 Green 56 - 60 Wood 61 - 180 Positioning 181 - 185 Random fast 186 - 190 Random middle 191 - 195 Random slow 196 - 200 Random very slow 201 - 215 Random very fast 216 - 235 CW Rotation adjustment 236 - 255 CWW Rotation adjustment	COLOR MODE 2 0 - 5 Neutral 6 - 10 Yellow 11 - 15 Blue 16 - 20 Magenta 21 - 25 Green light 26 - 30 Orange 31 - 35 Cyano 36 - 40 Pink 41 - 45 Red 46 - 50 Blu light 51 - 55 Green 56 - 60 Wood 61 - 180 Positioning 181 - 185 Random fast 186 - 190 Random middle 191 - 195 Random slow 196 - 200 Random very slow 201 - 215 Random very fast 216 - 235 CW Rotation adjustment 236 - 255 CWW Rotation adjustment

CH	6 CHANNELS (DV)	8 CHANNELS (DVP)	9 CHANNELS (DVP)
3	GOBOS 0 - 10 Neutral 11 - 20 GOBO 1 chann.4 controls rotation 21 - 30 GOBO 2 chann.4 controls rotation 31 - 40 GOBO 3 chann.4 controls rotation 41 - 50 GOBO 4 chann.4 controls rotation 51 - 60 Reduction 61 - 70 GOBO 5 chann.4 controls rotation 71 - 80 GOBO 6 chann.4 controls rotation 81 - 90 GOBO 7 chann.4 controls rotation 91 - 100 GOBO 8 chann.4 controls rotation 101 - 110 GOBO 1 chann.4 controls position 111 - 120 GOBO 2 chann.4 controls position 121 - 130 GOBO 3 chann.4 controls position 131 - 140 GOBO 4 chann.4 controls position 141 - 150 GOBO 5 chann.4 controls position 151 - 160 GOBO 6 chann.4 controls position 161 - 170 GOBO 7 chann.4 controls position 171 - 180 GOBO 8 chann.4 controls position 181 - 193 GOBOS Fast random 194 - 205 GOBOS Slow random 206 - 230 CW Rotation adjustment 231 - 255 CWW Rotation adjustment	GOBOS 0 - 10 Neutral 11 - 20 GOBO 1 chann.4 controls rotation 21 - 30 GOBO 2 chann.4 controls rotation 31 - 40 GOBO 3 chann.4 controls rotation 41 - 50 GOBO 4 chann.4 controls rotation 51 - 60 Reduction 61 - 70 GOBO 5 chann.4 controls rotation 71 - 80 GOBO 6 chann.4 controls rotation 81 - 90 GOBO 7 chann.4 controls rotation 91 - 100 GOBO 8 chann.4 controls rotation 101 - 110 GOBO 1 chann.4 controls position 111 - 120 GOBO 2 chann.4 controls position 121 - 130 GOBO 3 chann.4 controls position 131 - 140 GOBO 4 chann.4 controls position 141 - 150 GOBO 5 chann.4 controls position 151 - 160 GOBO 6 chann.4 controls position 161 - 170 GOBO 7 chann.4 controls position 171 - 180 GOBO 8 chann.4 controls position 181 - 193 GOBOS Fast random 194 - 205 GOBOS Slow random 206 - 230 CW Rotation adjustment 231 - 255 CWW Rotation adjustment	GOBOS 0 - 10 Neutro 11 - 20 GOBO 1 can.4 regola la rot. 21 - 30 GOBO 2 can.4 regola la rot. 31 - 40 GOBO 3 can.4 regola la rot. 41 - 50 GOBO 4 can.4 regola la rot. 51 - 60 RIDUTTORE 61 - 70 GOBO 5 can.4 regola la rot. 71 - 80 GOBO 6 can.4 regola la rot. 81 - 90 GOBO 7 can.4 regola la rot. 91 - 100 GOBO 8 can.4 regola la rot. 101 - 110 GOBO 1 can.4 regola il posiz. 111 - 120 GOBO 2 can.4 regola il posiz. 121 - 130 GOBO 3 can.4 regola il posiz. 131 - 140 GOBO 4 can.4 regola il posiz. 141 - 150 GOBO 5 can.4 regola il posiz. 151 - 160 GOBO 6 can.4 regola il posiz. 161 - 170 GOBO 7 can.4 regola il posiz. 171 - 180 GOBO 8 can.4 regola il posiz. 181 - 193 GOBOS Random veloce 194 - 205 GOBOS Random lento 206 - 230 Rot. in senso orario regolabile 231 - 255 Rot. in senso anti-orario regolabile
4	GOBOS ROTATION 0 - 5 STOP 6 - 255 From 0 to 540° GOBO positioning 6 - 130 CW Rotation adjustment of the GOBO 131 - 255 CWW Rotation adjustment of the GOBO	GOBOS ROTATION 0 - 5 STOP 6 - 255 From 0 to 540° GOBO positioning 6 - 130 CW Rotation adjustment of the GOBO 131 - 255 CWW Rotation adjustment of the GOBO	ROTAZIONE GOBOS 0 - 5 STOP 6 - 255 Da 0 a 540° per GOBO posizionabile 6 - 130 Reg. Rotazione oraria per GOBO in rotaz. 131 - 255 Reg. Rotazione anti-oraria per GOBO in rotaz.
5	PAN MOVEMENT	EFFECTS 0 - 10 OPEN 11 - 30 Prism 3 Facets 31 - 50 Prism 6 Facets 51 - 70 COLD Conversion Filter 71 - 90 WARM Conversion Filter 91 - 110 Automatic Frost from 0 to 100% 111 - 130 Automatic Frost from 100% to 0 131 - 250 Manual Frost 251 - 255 Full FROST	EFFECTS 0 - 10 OPEN 11 - 30 Prism 3 Facets 31 - 50 Prism 6 Facets 51 - 70 COLD Conversion Filter 71 - 90 WARM Conversion Filter 91 - 110 Automatic Frost from 0 to 100% 111 - 130 Automatic Frost from 100% to 0 131 - 250 Manual Frost 251 - 255 Full FROST
6	TILT MOVEMENT	PRISM ROTATION 0 - 5 STOP 6 - 130 CW Rotation 131 - 255 CWW Rotation	PRISM ROTATION 0 - 5 STOP 6 - 130 CW Rotation 131 - 255 CWW Rotation
7		PAN MOVEMENT	PAN MOVEMENT
8		TILT MOVEMENT	TILT MOVEMENT
9			DIMMER 0 - 10 DIMMER CLOSED 11 - 250 DIMMER Adjustment 251 - 255 DIMMER OPEN WARNING: position CHANNEL 1 at a value between 6 and 100, in order to control DIMMER with this channel.

SPECIAL ACTION

If the RDMX function have been activated in the configuration menu, it's possible, by a combination of the channels values, to allow the projector MASTER RESET.

MASTER RESET:

Channel 1 = Value 0

Channel 2 and Channel 3 = Value 0 > 255 > 0

7.0 FOCUS ADJUSTMENT



In order to adjust the objective, it is necessary to pre-set channels so that the shutter is open; assign the white colour and insert the selected gobo.

Rotate the knob on the front part of the projector which is highlighted by the writing **FOCUS** (see the picture) and adjust the focusing device of the objective, positioning the projector wherever you wish.



8.0 LAMP ADJUSTMENT

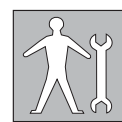


Lamp adjustment is necessary to obtain a uniform and powerful light beam. Switch on the projector and set the channels without gobo and colors. Adjust the three screws **B** until you reach the ideal condition between power and homogeneity.

Warning! The lamp is pre-regulated by the factory. Only fine-adjustment. Don't move the screws B up to upper or lower extremities.



9.0 GOBOS REPLACEMENT



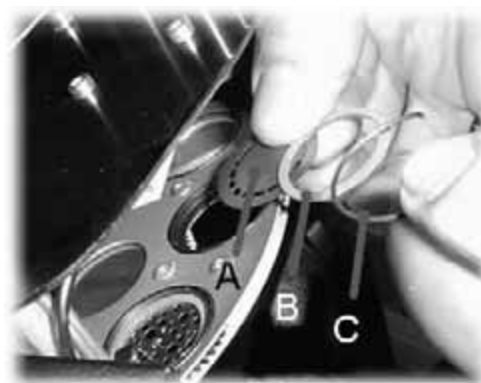
WARNING: switch off the projector before operating

Open the cover of the **Performance 250 DV/DVP** first.

The gobo-wheel contains both steel gobos and dichroic gobos. They are interchangeable simply by removing the little elastic ring with a screwdriver (see figure).

In order to replace a dichroic gobo with a steel gobo, put a thick ring between the gobo and the elastic ring (see part. B).

Insert the chosen gobo and place again the steel ring, paying attention that it reaches its correct position.



10.0 ORDINARY MAINTENANCE

WARNING: switch off the projector before operating.



Ordinary maintenance on the projectors **PERFORMANCE 250 DV/DVP** is necessary to maintain the perfect efficiency of the unit and to avoid defects like the low luminosity of the light beam, irregular motion of the mirror or other rotating components. In the figures you can see those components that can easily accumulate dust and grease. Clean them using a soft cloth and common glass-cleaners. As regard the picture on right side, the intervention must be

effected by a mechanical maintenance operator, who will clean the anti-heat filter, reachable only from the inside of the projector.



10.1 EXTRAORDINARY MAINTENANCE

To make an extraordinary maintenance, it is necessary the presence of a generic or qualified mechanical operator, according to the type of the needed intervention. To make it simple, we advice to completely extract the mechanical part of the **PERFORMANCE 250 DV/DVP** from its box : look figure where you can see the hexagonal screws (**A&B**) 4 for DV model and 3 for DVP model; the focus bracket screws (**C**) that have to be removed, so that you can extract the whole mechanical part, supporting the motors and the various wheels (effects, color, gobos). In this way it will be much more easy to observe the components to maintain and/or replace. In the following figures it's possible to observe the different particulars that have to be cleaned and, at the same time, the whole mechanical structure mounted with all its components shown.



You must particularly take care of the sensors which are really fundamental in the unit working.

The sensors are absolutely necessary when a general reset of the projector is needed. If this function is not correctly executed, it will totally compromise the regular working of the projector, at least for the group referred to the sensor itself. Es : when there's an irregular reset of the color wheel, all the settled colors will not correspond to the colours listed in the chapter about DMX digital values.

The same situation will occur in the case of the gobos wheel or the effects wheel.

The section shutter/strobo/dimmer doesn't use sensors during the reset positioning but it's conditioned by a mechanical beat of the shutter shovels.

You must carefully clean also the moving zoom lens. After several working hours dust and grease will be stored on this lens, carried inside the projector by air flow.

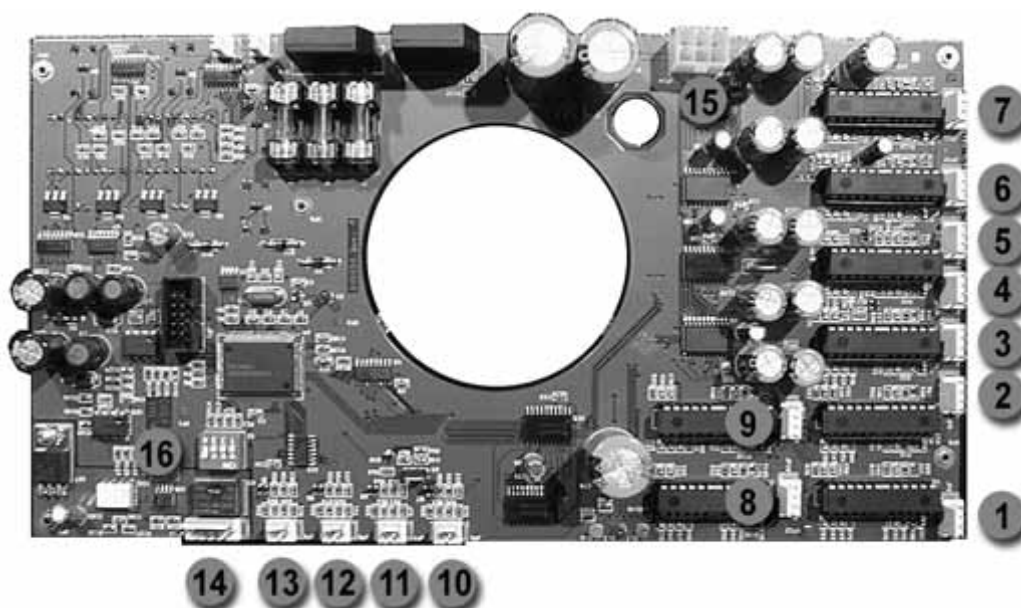
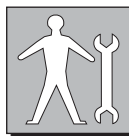


10.2 ELECTRONIC MAINTENANCE

This section is dedicated in detail to the electronic connections between the card and the mechanical components, assembled in the projector. These informations will be absolutely necessary when the mechanical unit has to be removed from the projector for maintenance and/or repair.

The connections are made using handy connectors and are detailed in figure where you can find indications about the connection between a specific connector and a specific component of the mechanical unit. This includes the motors and the sensors of the various effects wheels (color, gobos, prisms, shutter etc.).

WARNING! An improper use of this documentation made by not specifically qualified staff can damage irretrievably the electronic and/or mechanical components of the projector.



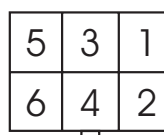
1	GOBOS rotation motor
2	COLOR wheel motor
3	GOBOS wheel motor
4	SHUTTER motor 1
5	SHUTTER motor 2 (only DVP)
6	EFFECTS wheel motor (only DVP)
7	PRISM rotation motor (only DVP)
8	PAN movement motor
9	TILT movement motor
10	COLOR wheel sensor
11	GOBOS wheel sensor
12	GOBOS rotation sensor
13	EFFECTS wheel sensor (only DVP)
14	DMX input
15	Power IN
16	DipSwitch DV/DVP (S1)

16 - DipSwitch S1













SW 4 ON = DVP
SW 4 OFF = DV

15 - Alimentazione / Power

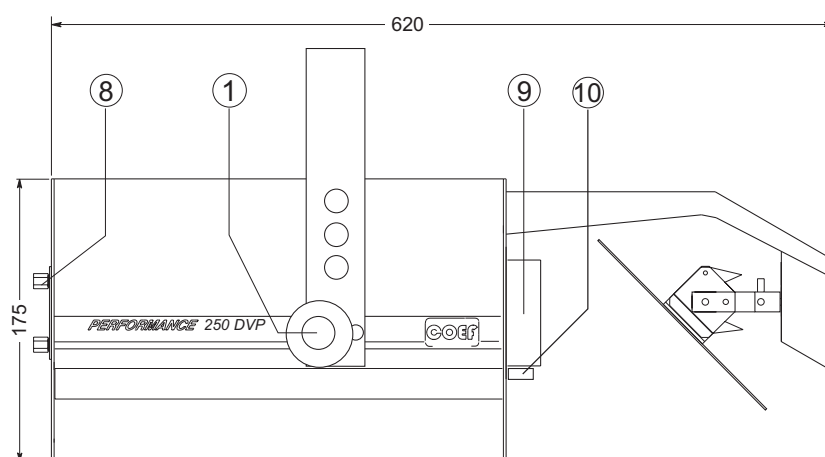


1-2 12V.AC. \pm 5%
3-4 28V.AC. \pm 5%
5-6 28V.AC. \pm 5%

11.0 TROUBLESHOOTING

PROBLEM	CAUSE	ACTION
  The projector doesn't switch on	<ul style="list-style-type: none"> - The power supply is not present - The lamp is not working - The thermal switch is active 	Check if the luminous indicator is lighted or not. Replace the lamp. Just to wait for little of time
  The projector switches on but doesn't answer to commands	<ul style="list-style-type: none"> - Wrong DMX configuration - Defective cables - LED A is off - Defective control unit 	Make sure that the projector is correctly configured. Replace or repair the DMX cable. Check the control unit & DMX cable Check the control unit by means of other working projectors. Technical aid is required.
 Defecting projection	<ul style="list-style-type: none"> - The lens is broken - Dust or grease stored on the all parts of projector 	Check that the lens are not broken. <i>Remove dust or grease stored on lenses.</i>
 Projection with halo	<ul style="list-style-type: none"> - Dust or grease stored on the all parts of projector 	Carefully clean the optical group lenses and the projector components (see "Maintenance" chapter).
  The color or other effects doesn't coincide to the selected value.	<ul style="list-style-type: none"> - Position sensor dirty with dust or grease - Defective motor - Electronic board 	Carefully clean the optical group lenses and the projector components (see "Maintenance"). Technical aid is required.
  The PAN or TILT movement doesn't coincide to the selcted value	<ul style="list-style-type: none"> - Defective motor - Electronic board 	Technical aid is required.

12.0 DIMENSION & COMPONENTS



LIST OF PARTS

- 1 - Lock Knobs
- 2 - DMX IN
- 3 - DMX OUT
- 4 - Screws for lamp panel
- 5 - Lamp panel
- 6 - Mains switch
- 7 - Mains power socket
- 8 - Adjustment screws for light beam
- 9 - Final lens
- 10 - Focus adjustment

